

REMARKS/ARGUMENTS

This paper is in response to the Office Action of April 30, 2008. This Amendment is submitted within the three month period for reply extending to July 30, 2008. The current status of the claims is summarized below.

Claims 1, 6, 14, 19, 20, 23, 26, 33, 36, 41, 44, 49, 53 and 56 are currently amended.

Claims 9-13, 15-18, 21-22, 29-32, 34-35, 40, 52 and 55 are cancelled.

Claims 1-8, 14, 19-20, 23-28, 33, 36-39, 41, 42-51, 53-54, 56-61 remain pending.

Rejections under 35 U.S.C. 102

Claims 1-4, 9-13, 15, 20-22, 27-31, 33-37, 39-47, 52-55 and 60-61 were rejected under 35 USC § 102(e) as being anticipated by DiMambro (U. S. Patent No.7,076,545) (hereinafter “DiMambro”). This rejection is respectfully traversed.

Both the Applicants and Inventors of DiMambro, at the time of invention, had a duty to assign to Sun Microsystems, Inc., the common assignee of both DiMambro and the present application. Therefore, DiMambro falls under 102(e)/103(c) exception. Accordingly, the Office is requested to remove DiMambro as 102(e) art against the pending claims.

Claims 1-5, 9-13, 15, 20-22, 27-30, 44-48, 52-55, 60-61 were rejected under 102(b) as being anticipated by Chang et al. (U.S. Patent No. 6,338,078) (hereinafter “Chang”). Applicant respectfully traverses this rejection.

Chang is directed towards distributing packets received on the network to N high priority threads wherein N is the number of CPUs on the system. This is to eliminate CPU bottleneck for high speed network I/Os, thereby improving network performance. (See Abstract). As can be clearly seen, in Chang the data packets for a particular connection are distributed among the various threads running in various CPUs available on the system. This is different from the claimed invention wherein the data packets for a particular connection are all queued to a single queue associated with a single processor and is processed by a single thread associated with the single queue of the single processor. Based on the above argument, Applicant respectfully submits that the claimed invention is patentably distinct from Chang and requests the withdrawal of the 102(b) rejection. Further, claims 9-13, 15, 21-22, 29-30, 52 and 55 have been cancelled.

Rejections under 35 U.S.C. 103(a)

Claim 14 was rejected under 103(a) as being unpatentable over Chang et al. The rejection is traversed.

Claim 14 includes all the limitation of the amended independent claim 1. As mentioned above, Chang does not suggest or teach each and every element of the claimed invention and it would not be obvious to one of ordinary skill in the art to substitute the queue of Chang with any type of queue, including a squeue, to arrive at the claimed invention. As a result, the Applicant respectfully submits that claim 14 is patentable over Change and request the withdrawal of the 103 rejection.

Claims 6-8, 16-19, 23-26, 31-43, 49-51 and 56-59 were rejected under 103(a) as being unpatentable over Chang in view of Syvanne (U.S. Publication No. 2002/0112188) (hereinafter Syvanne). This rejection is traversed.

The Office is requested to note that claims 9-13, 15-18, 21-22, 29-32, 34-35, 40, 52 and 55 have been cancelled.

As discussed above, Chang does not suggest or teach processing all packets of a connection using a single thread of a single queue executing on a single processor of a multi-processor server system. Chang is directed towards distributing packets received on the network to N high priority threads wherein N is the number of CPUs on the system. In Chang, the data packets for a particular connection are distributed among the various threads running in various CPUs available on the system. This is to eliminate CPU bottleneck for high speed network I/Os, thereby improving network performance. (See Abstract). This is different from the claimed invention which uses single thread of a single processor to process all the packets of a connection.

Syvanne discloses a method to generate a connection data structure using information received from packets initiating packet data connection. An initial packet data information is received and stored in a connection data structure. Further, when an updated packet data information is received for the packet, the method compares the updated packet data information against the one stored in the connection data structure. If a conflict arises between the updated packet information and the information in the connection data structure, then the updated packet information is either allowed to continue being processed into the connection data structure if a confirmation is received or is discarded. Syvanne does not suggest or teach what or how the information from the connection data structure is used.

Combining Syvanne with Chang will not teach all the limitations of the claimed invention, which is to assign all packets from a connection to a single queue associated with a single thread of a single processor within a multi-process server system. Based on the aforementioned, Applicant submits that the claimed invention is patentable over the combined teachings of the cited arts and requests the withdrawal of the 103 rejection of claims 6-8, 16-19, 23-26, 31-43, 49-51 and 56-59.

The Applicant submits that all of the pending claims are in condition for allowance. Therefore, a Notice of Allowance is requested. If the Examiner has any questions concerning the present amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6905. If any other fees are due in connection with filing this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No SUNMP462). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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